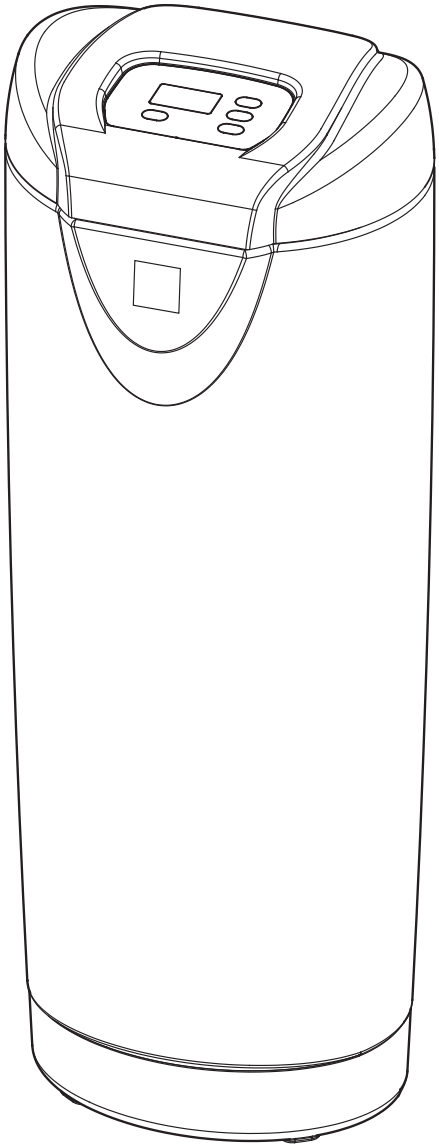
Installation and Operation Manual



Model MCWF

How to install, operate and maintain your Whole Home Water Filtration System

Do not return unit to store

If you have any questions or concerns when installing, operating or maintaining your Whole Home Water Filtration System, call our toll free number:

1-888-64 WATER

(1-888-649-2837)

Monday - Friday, 8 AM - 7 PM EST
or visit www.systemsaver.com

When you call, please be prepared to provide the model and serial number of your product, located on the rating decal on back of the cover.

System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of chlorine taste and odor, and certified to NSF/ANSI Standard 372.

7339955 (Rev. C 4/11/14)

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MORTON RESIDENTIAL WARRANTY

Morton guarantees, to the original owner, that:

- For a period of ten (10) years from the date of purchase, the fiberglass filtration media tank will not rust, corrode, leak, burst, or in any other manner, fail to perform its proper functions.
- For a period of one (1) year from the date of purchase, all other parts will be free of defects in material and workmanship and will perform their normal functions.

If, during such respective period, a part proves to be defective, Morton will ship a replacement part, directly to your home, without charge. Labor necessary to maintain this product is not covered by the product warranty.

If you have questions regarding a Morton product, need assistance with installation or troubleshooting, wish to order a part or report a warranty issue, we are just a phone call away. Simply dial 1-888-64 WATER (1-888-649-2837) for assistance, or visit www.systemsaver.com.

This Whole Home Water Filtration System is manufactured for Morton, P.O. Box 25290, Woodbury, MN 55125-0290

General Provisions

The above warranties are effective provided the Whole Home Water Filtration System is operated at water pressures not exceeding 125 psi, and at water temperatures not exceeding 120°F; provided further that the Whole Home Water Filtration System is not subject to abuse, misuse, alteration, neglect, freezing, accident or negligence; and provided further that the Whole Home Water Filtration System is not damaged as the result of any unusual force of nature such as, but not limited to, flood, hurricane, tornado or earthquake.
Morton is excused if failure to perform its warranty obligations is the result of strikes, government regulation, materials shortages, or other circumstances beyond its control.

***THERE ARE NO WARRANTIES ON THE WHOLE HOME WATER FILTRATION SYSTEM BEYOND THOSE SPECIFICALLY DESCRIBED ABOVE. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED TO THE EXTENT THEY MIGHT EXTEND BEYOND THE ABOVE PERIODS. THE SOLE OBLIGATION OF MORTON UNDER THESE WARRANTIES IS TO REPLACE OR REPAIR THE COMPONENT OR PART WHICH PROVES TO BE DEFECTIVE WITHIN THE SPECIFIED TIME PERIOD, AND MORTON IS NOT LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. NO MORTON DEALER, AGENT, REPRESENTATIVE, OR OTHER PERSON IS AUTHORIZED TO EXTEND OR EXPAND THE WARRANTIES EXPRESSLY DESCRIBED ABOVE.**

Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damage, so the limitations and exclusions in this warranty may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state. This warranty applies to consumer-owned installations only.

Specifications & Performance Claims

This system has been tested according to NSF/ANSI 42 for the reduction of chlorine taste and odor. The concentration of the indicated substance in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42.

While testing was performed under standard laboratory conditions, actual performance of the system may vary based on local water conditions.

SPECIFICATIONS	
	Model MCWF
Rated Service Flow Rate	6.0 gpm (22.7 L/min.)
Pressure Drop at Rated Service Flow	10 psig* (68.9 kPa)
Pressure Drop at 9.6 gpm	15 psig* (103.4 kPa)
Water Pressure Limits (minimum / maximum)	30 - 125 psi (206.8 - 861.8 kPa)
Water Temperature Limits (minimum / maximum)	40 - 120 °F (5 - 49 °C)
Drain Flow Rate	3.4 gpm
Rated Capacity at Chlorine Concentration** of: 0.50 ppm 0.75 ppm 1.0 ppm 1.5 ppm 2.0 ppm	 2,280,000 gal.* 1,520,000 gal.* 1,140,000 gal.* 760,000 gal.* 570,000 gal.
Sediment Removal with 30-40 micron particle size	95% or more
Sediment Removal with 40-50 micron particle size	99% or more

* From independent laboratory test data.

** Typical residential chlorine concentration is 0.5 to 1.0 ppm.

This system conforms to NSF/ANSI Standard 42 for the specific performance claims as verified and substantiated by test data.

PERFORMANCE CLAIMS			
Substance	**Influent Challenge Level**	**Reduction Requirement**	**Average Percent Removal**
Chlorine	2.0 ±10% mg/L	50%	82.8%

Questions? Call Toll Free 1-888-64 WATER (1-888-649-2837) Monday- Friday, 8 AM - 7 PM EST
or visit www.systemsaver.com

When you call, please be prepared to provide the model and serial number, located on the rating decal on back of the cover.

Dimensions

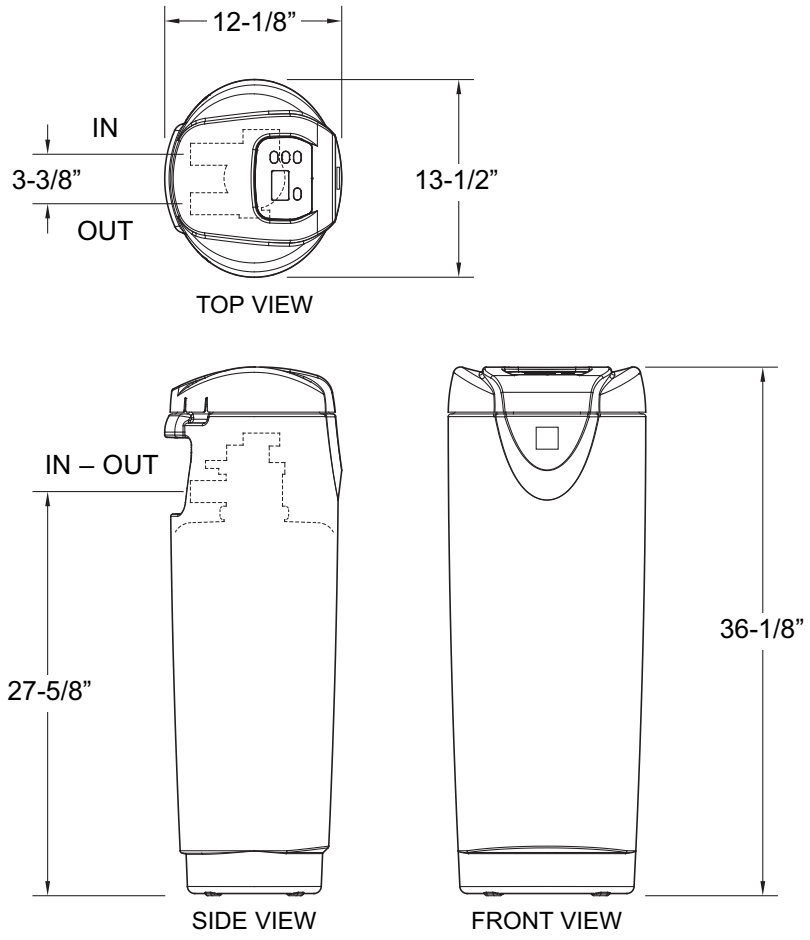


FIG. 1

Inspect Shipment

The parts required to assemble and install the Whole Home Water Filtration System are included with the unit. Thoroughly check the Whole Home Water Filtration System for possible shipping damage and parts loss. Also inspect and note any damage to the shipping carton.

Remove and discard (or recycle) all packing materials. To avoid loss of small parts, we suggest you keep the small parts in the parts bag until you are ready to use them.

Packing List

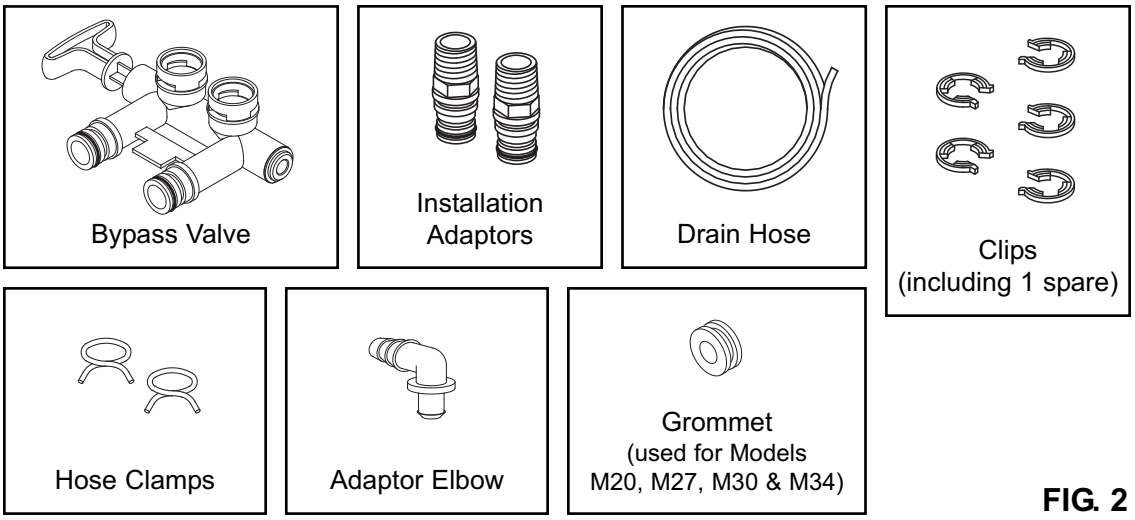


FIG. 2

Do not return the Whole Home Water Filtration System to store.

If you have any questions, or there are missing parts or damage, please call **Toll Free 1-888-64 WATER (1-888-649-2837)** Monday - Friday, 8 am - 7 pm EST.

When you call, please be prepared to provide the model and serial number, found on the rating decal on back of the cover.

For more installation or service information, visit **www.systemsaver.com**.

Before You Start

- Use care when handling the Whole Home Water Filtration System. Do not turn upside down, drop, or set on sharp protrusions.
- The Whole Home Water Filtration System has a maximum allowable inlet water pressure of 125 psi and a minimum of 30 psi. If daytime pressure is over 80 psi, nighttime pressure may exceed the maximum. Use a pressure reducing valve if necessary (Adding a pressure reducing valve may reduce the flow.). If your home is equipped with a back flow preventer, an expansion tank must be installed in accordance with local codes and laws.
- The Whole Home Water Filtration System works on 28V DC electrical power, supplied by a direct plug-in power supply (included). Be sure to use the included power supply, and plug it into a nominal 120V, 50/60 Hz household outlet that is in a dry location only, grounded and properly protected by an overcurrent device such as a circuit breaker or fuse.
- Do not use the Whole Home Water Filtration System with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

European Directive 2002/96/EC requires all electrical and electronic equipment to be disposed of according to Waste Electrical and Electronic Equipment (WEEE) requirements. This directive or similar laws are in place nationally and can vary from region to region. Please refer to your state and local laws for proper disposal of this equipment.

In the state of Massachusetts: The Commonwealth of Massachusetts plumbing code 248-CMR shall be adhered to. A licensed plumber shall be used for this installation.

How a Whole Home Water Filtration System Works

Normal Operation

During normal operation water enters the Whole Home Water Filtration System and flows through several filtration processes where tastes, odors and sediment are reduced.

Clean Rinse Cycle

A Clean Rinse cycle will automatically be initiated based on how the controller has been programmed. The Clean Rinse cycle lifts and expands the media bed to rejuvenate the media and then repacks the bed for continued use. During the Clean Rinse cycle, dirt, sediment, etc. are flushed from the Whole Home Water Filtration System down the drain.

Applications for a Whole Home Water Filtration System

- Do not use the Whole Home Water Filtration System with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- The Whole Home Water Filtration System may not be an effective treatment method for water sources with a hydrogen sulfide problem (rotten egg odor or taste) If your water has hydrogen sulfide, contact a water treatment expert or call 1-888-64 WATER.
- The Whole Home Water Filtration System will not remove iron and is not intended to replace iron treatment equipment.
- Although the Whole Home Water Filtration System has sediment filter capabilities, additional sediment filtration may be needed in problem water applications.

Installation Requirements

Location Requirements

Consider the following when selecting an installation location for the Whole Home Water Filtration System.

- Do not operate the Whole Home Water Filtration System where freezing temperatures occur. Do not attempt to treat water over 120ºF. Freezing temperatures or hot water damage voids the warranty.
- To condition all water in the home, install the Whole Home Water Filtration System close to the water supply inlet, and before all other plumbing connections, except outside water pipes.
- For a home with municipal water supply, install the Central Water Filtration System between the home's incoming water supply and the water softener, if one is being used (See Figure 3A). If the home has well water, reverse the order of the Central Water Filtration System and the water softener (See Figure 3B).
- A nearby drain is needed to carry away Clean Rinse discharge water. Use a floor drain, laundry tub, sump, standpipe, or other options (check your local codes). See "Air Gap Requirements" and "Valve Drain Requirements" sections. If a drain is not available, it is still possible to operate the Whole Home Water Filtration System in a manual Clean Rinse mode. See "Operating in Manual Clean Rinse Mode." The automatic Clean Rinse must be disabled if the Whole Home Water Filtration System will not be connected to a drain (See Page 8).
- The Whole Home Water Filtration System works on 28V DC electrical power, supplied by a direct plug-in power supply (included). Provide a 120V, 50/60 Hz electrical outlet in accordance with NEC and local codes.
- Do not install the Whole Home Water Filtration System on a hot water line (See Figures 3A & 3B, below).
- Avoid installing in direct sunlight. Excessive sun heat may cause distortion or other damage to non-metallic parts.

The Proper Order To Install Water Treatment Equipment

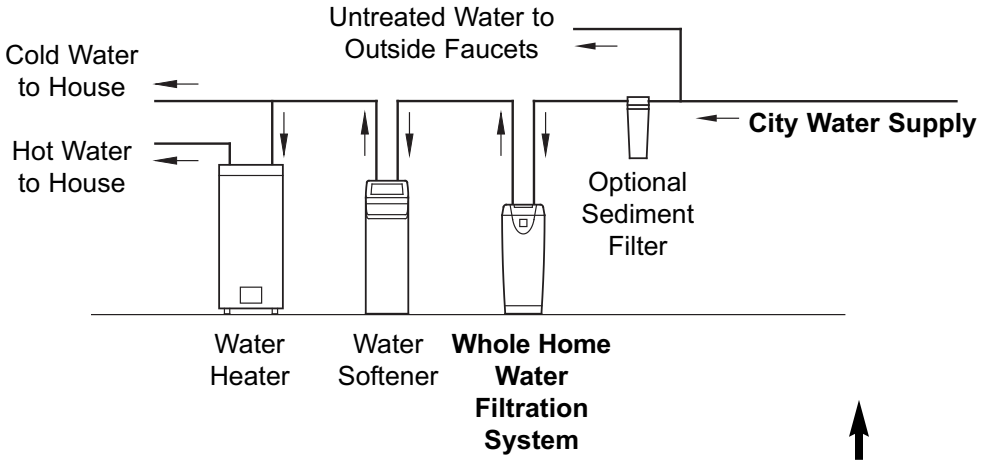


FIG. 3A

OR

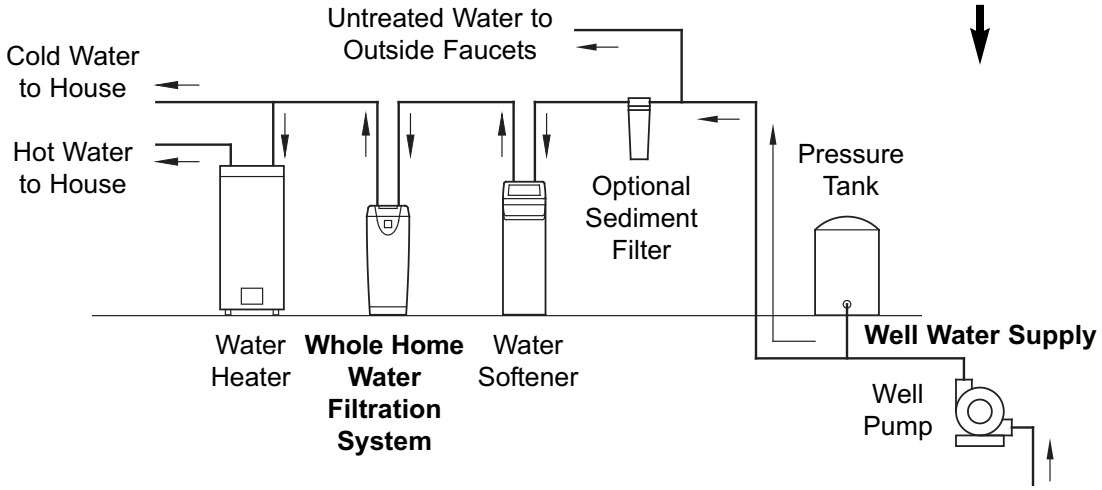


FIG. 3B

Installation Requirements

Plumbing Codes

All plumbing must be completed in accordance with national, state and local plumbing codes.

In the state of Massachusetts: The Commonwealth of Massachusetts plumbing code 248-CMR shall be adhered to. A licensed plumber shall be used for this installation.

Air Gap Requirements

A drain is needed for Clean Rinse discharge water. A floor drain, close to the Whole Home Water Filtration System, is preferred. A laundry tub, standpipe, etc. are other drain options. Secure valve drain hose in place. Leave an air gap of 1-1/2” between the end of the hose and the drain. This gap is needed to prevent backflow of sewer water into the Whole Home Water Filtration System . Do not put the end of the drain hose into the drain.

Valve Drain Requirements

Using the flexible drain hose (included), measure and cut to the length needed. Flexible drain hose is not allowed in all localities (check your plumbing codes). If local codes do not allow use of a flexible drain hose, a rigid valve drain run must be used. Purchase a compression fitting (1/4 NPT x 1/2 in. minimum tube) and 1/2" tubing from your local hardware store. Plumb a rigid drain as needed (see Figure 4, below).

NOTE: Avoid drain hose runs longer than 30 feet. Make the valve drain line as short and direct as possible.

It is recommended that the Whole Home Water Filtration System be installed near a drain. However, if a drain is not available, it is still possible to operate the Whole Home Water Filtration System in a manual Clean Rinse mode. See “Operating in Manual Clean Rinse Mode” section. The automatic Clean Rinse function must be disabled if the Whole Home Water Filtration System will not be connected to a drain.

Connecting Valve to Drain

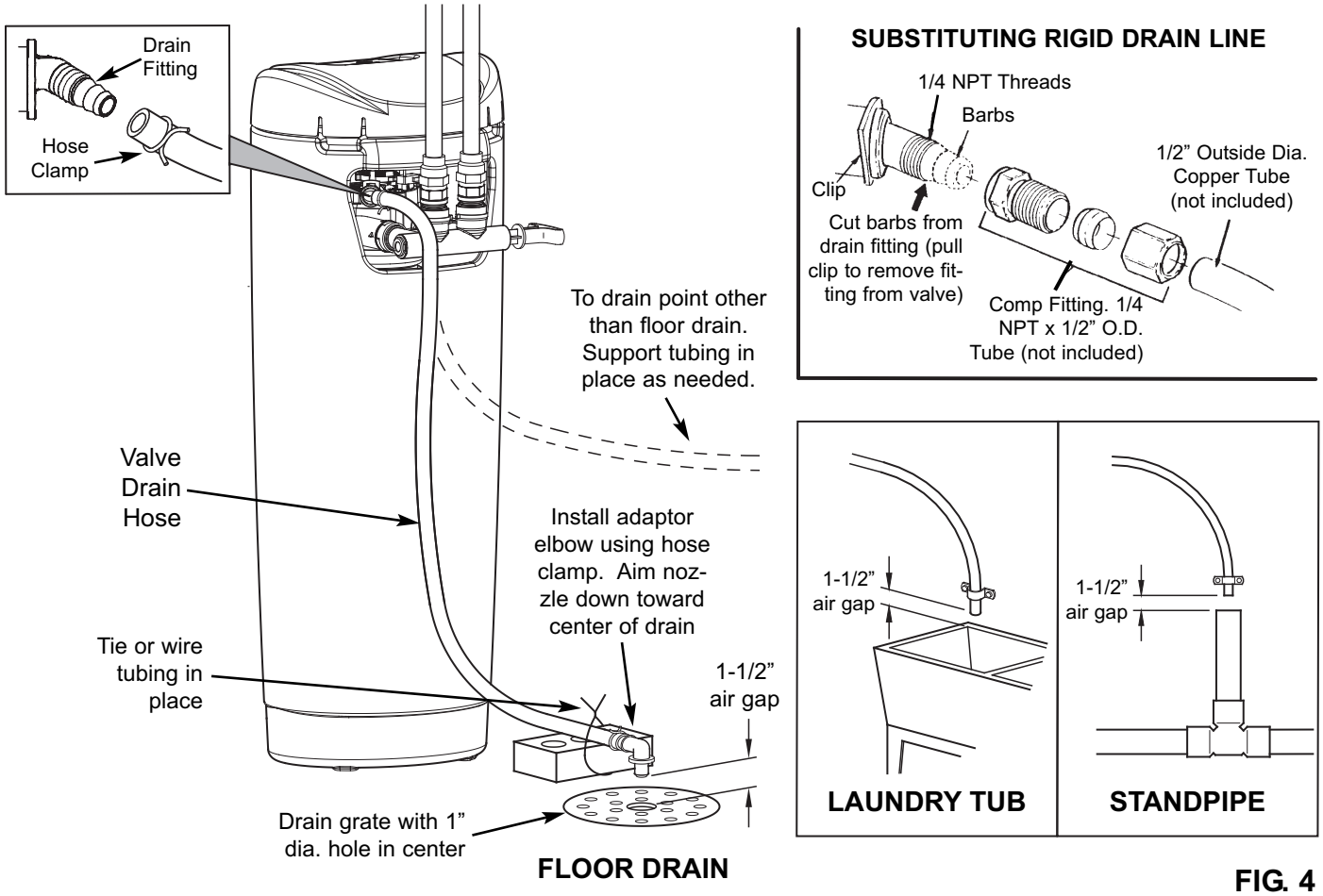

Drain Fitting
Hose Clamp
To drain point other than floor drain. Support tubing in place as needed.
Valve Drain Hose
Install adaptor elbow using hose clamp. Aim nozzle down toward center of drain
Tie or wire tubing in place
1-1/2” air gap
Drain grate with 1” dia. hole in center
FLOOR DRAIN
SUBSTITUTING RIGID DRAIN LINE
1/4 NPT Threads
Barbs
1/2” Outside Dia. Copper Tube (not included)
Clip
Cut barbs from drain fitting (pull clip to remove fitting from valve)
Comp Fitting. 1/4 NPT x 1/2” O.D. Tube (not included)
1-1/2” air gap
1-1/2” air gap
LAUNDRY TUB
STANDPIPE

FIG. 4

Installation Requirements

Inlet - Outlet Plumbing Options

Always install either a single bypass valve (provided) to the contractor/plumber-supplied plumbing, as shown in Figure 7 OR if desired, a 3 valve bypass system (parts not included) can be installed, as shown in Figure 6. Bypass valves allow you to turn off water to the Whole Home Water Filtration System for maintenance if needed, but still have water in house pipes.

Use either:

- Copper pipe
- Threaded pipe
- PEX (Crosslinked Polyethylene) pipe
- CPVC plastic pipe
- Other pipe approved for use with potable water

IMPORTANT: Do not solder with plumbing attached to installation adapters and single valve bypass. Soldering heat will damage the adapters and valve.

Cross Over

In what direction does the water flow?

Be sure to plan piping so water flow is to the Whole Home Water Filtration System valve INLET. Plan a crossover if flow is from left to right.

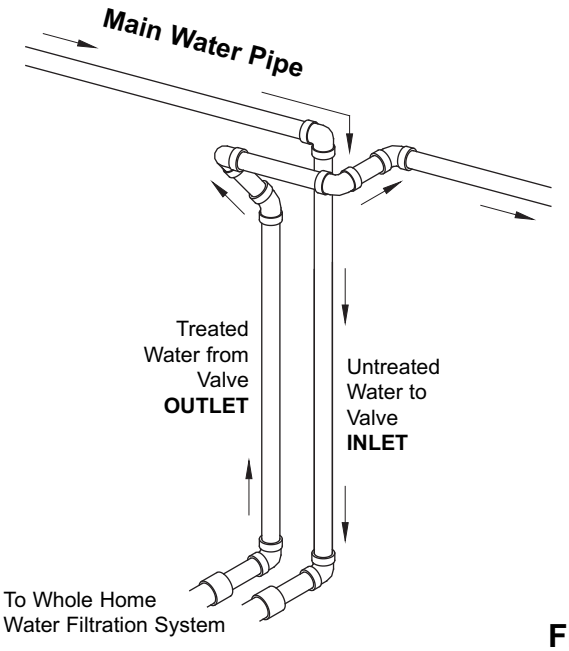


FIG. 5

3 Valve Bypass

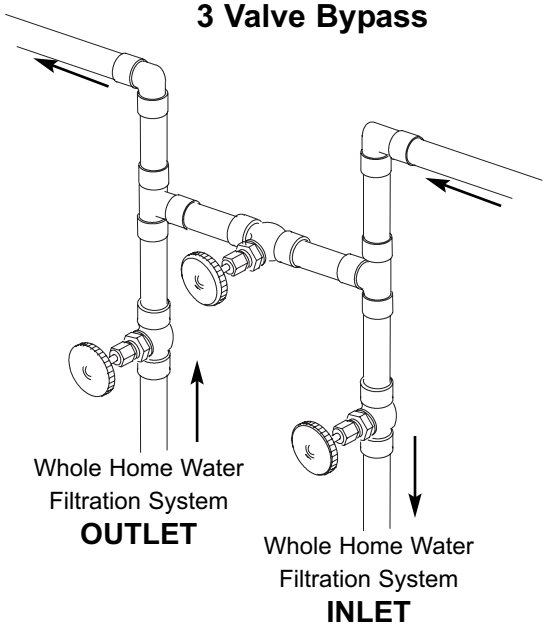
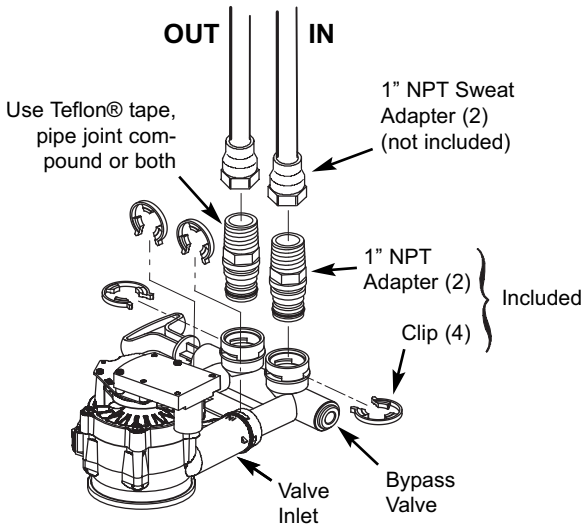


FIG. 6

Connecting Plumbing to Valve



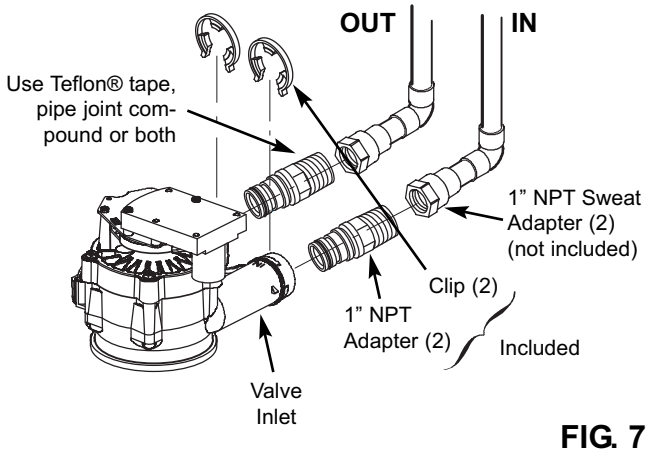


FIG. 7

Installation Instructions

Step 1. Turn Off Water Supply

1. Close the main water supply valve, near the well pump or water meter.

2. Open all faucets to drain water from the house pipes.

NOTE: Be sure not to drain water from the water heater, as damage to the water heater elements could result.

Step 2. Move the Whole Home Water Filtration System into Place

1. Move the Whole Home Water Filtration System into installation position. Set it on a level surface. If needed, place the unit on a section of plywood, a minimum of 5/8" thick. Then place shims under the plywood to level the Whole Home Water Filtration System (see Figure 8).

Level if Necessary

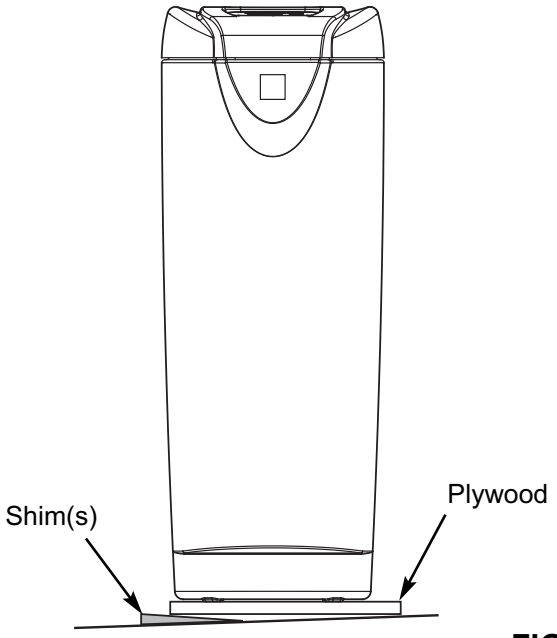


FIG. 8

Step 3. Complete Inlet and Outlet Plumbing

Measure, cut, and loosely assemble pipe and fittings from the main water pipe to the inlet and outlet ports of the water softener valve. Be sure to keep fittings fully together, and pipes squared and straight.

Be sure hard water supply pipe goes to the water softener valve inlet side.

NOTE: Inlet and outlet are marked on the water softener valve. Trace the water flow direction to be sure hard water is to inlet.

IMPORTANT: Be sure to fit, align and support all plumbing to prevent putting stress on the water softener valve inlet and outlet. Undue stress from misaligned or unsupported plumbing may cause damage to the valve.

Complete the inlet and outlet plumbing for the type of pipes you will be using.

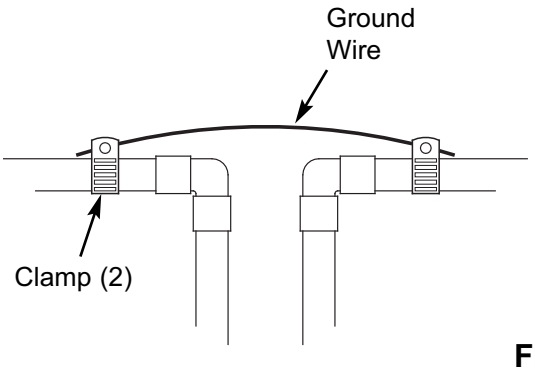


FIG. 9

Step 4. Cold Water Pipe Grounding

CAUTION: The house cold water pipe (metal only) is often used as a ground for the house electrical system, The 3-valve bypass type of installation, shown in Figure 6, will maintain ground continuity. If you use a plastic bypass valve at the unit, continuity is broken. To restore the ground, do the following:

1. Install a #4 copper wire across the removed section of main water pipe, securely clamping it at both ends (See Figure 9) - parts not included.

NOTE: Check local plumbing and electrical codes for proper installation of the ground wire. The installation must conform to them. In Massachusetts, plumbing codes of Massachusetts shall be conformed to. Consult with your licensed plumber.

Installation Instructions

Step 5. Install Valve Drain Hose

NOTE: See valve drain options on page 8.

1. Measure, cut to needed length and connect the 3/8" drain line (provided) to the Whole Home Water Filtration System valve drain fitting (See Figure 10). Use a hose clamp to hold the hose in place.

IMPORTANT: If codes require a rigid drain line see "Valve Drain requirements" section.

2. Run the drain hose or copper tubing to the floor drain. Secure drain hose. This will prevent the drain line from "whipping" during Clean Rinse cycles. See "Air Gap Requirements" section.

Step 6. Test for Leaks

1. Make sure the single bypass valve (or 3 valve bypass, if installed) is in the bypass position, with the handle pushed in (See Figure 10).

2. Fully open the main water supply valve.

3. Briefly open a faucet in the house to refill the plumbing with water.

4. Slowly move the bypass valve(s) to the normal operation position, pausing several times to allow the unit to pressurize slowly (See Figure 10).

5. Check for leaks at all the plumbing connections you made.

IMPORTANT: Start up procedure must be run prior to using any filtered water. Follow the instructions below and on Page 13.

Step 7. Turn On the Whole Home Water Filtration System

During installation, the Whole Home Water Filtration System wiring may be moved or jostled from place. Check to be sure all leadwire connectors are secure on the back of the electronic board and be sure all wiring is away from the valve gear and motor area, which rotates during Clean Rinse cycles.

1. Plug the Whole Home Water Filtration System's power supply into an electrical outlet that is not controlled by a switch.

2. In the display, the words "PRESENT TIME" appear and 12:00 PM begins to flash. Set the clock according to the "Set Time of Day" section on Page 12.

3. Run the start up procedure, as detailed on Page 13.

Single Bypass Valve

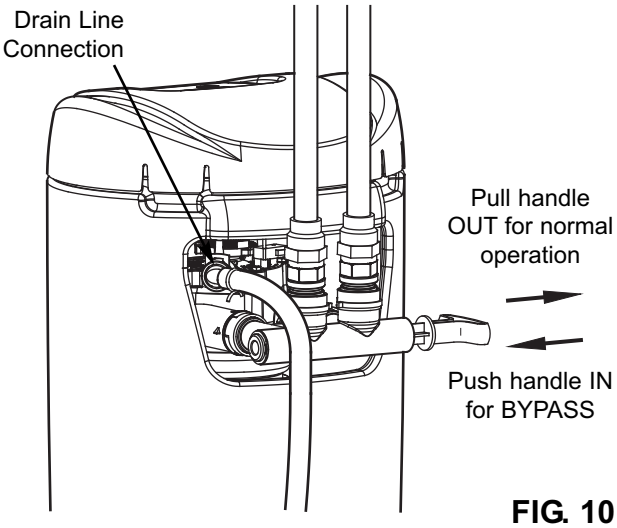


FIG. 10

Programming the Whole Home Water Filtration System

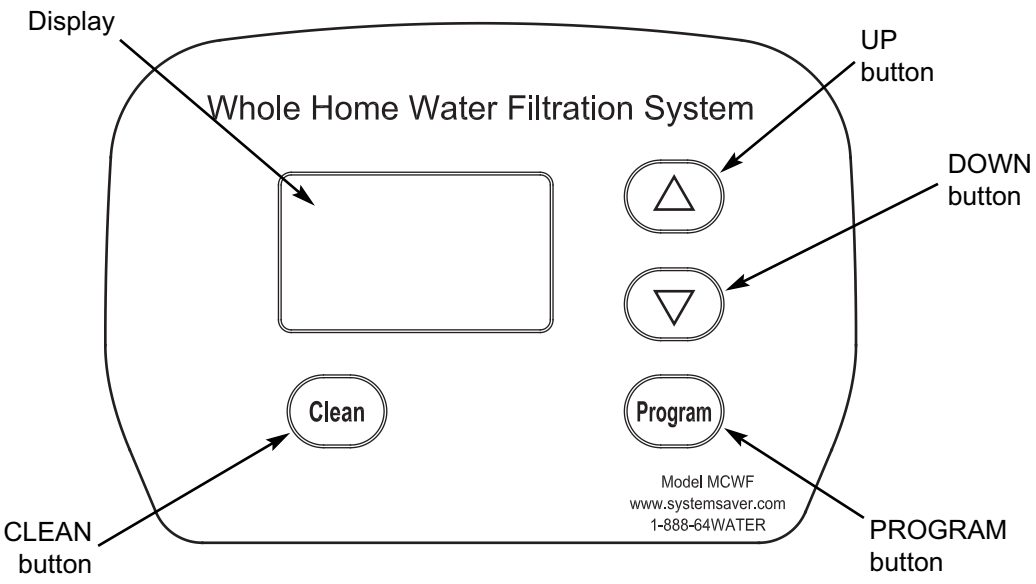


FIG. 11

When the power supply is plugged into the electrical outlet, a model code and a test number (example: J2.0), begin to flash in the faceplate display. Then, 12:00 PM and the words “PRESENT TIME" begin to flash.

NOTE: If “- - - -” shows in the display, press the △ UP or ▽ DOWN button until the model code “CF 8” shows in the display. Then, press the PROGRAM button to set, and change to the flashing “PRESENT TIME" display.

Set Time of Day

If the words “PRESENT TIME" do not show in the display, press the PROGRAM button until they do.

1. Press the △ UP or ▽ DOWN buttons to set the present time. Up moves the display ahead; down sets the time back. Be sure AM or PM is correct.

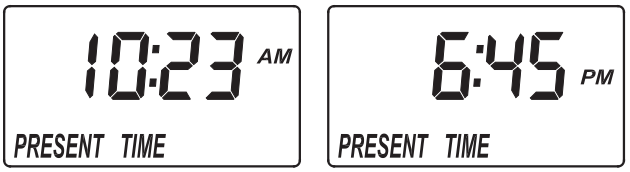


FIG. 12

NOTE: Press buttons and quickly release to slowly advance the display. Hold the buttons down for fast advance.

2. Press the PROGRAM button a few times, until the time appears on the display, but is not flashing.

Questions? Call Toll Free 1-888-64 WATER (1-888-649-2837) Monday- Friday, 8 AM - 7 PM EST
or visit www.systemsaver.com

When you call, please be prepared to provide the model and serial number, located on the rating decal on back of the cover.

Start Up Procedure

IMPORTANT:

Run the start up cycle immediately after completing installation, before using any water in the home.

The filtration media in this Whole Home Water Filtration System contains a small number of harmless activated carbon particles generated during shipping that are small enough to exit the system with water flow. It is normal for these particles to cause a temporary discoloration of the water coming out of the system. To avoid discolored water at your home's faucets the system's start up cycle should be initiated to rinse the particles and any discolored water down the drain.

If the Whole Home Water Filtration System is used without first running the start up cycle, you will notice that the water will temporarily have a gray color until the particles have exited the system.

To Initiate the start up cycle:

1. Make sure the drain hose is attached to the Whole Home Water Filtration System and the other end is secured over a drain (see "Install Valve Drain Hose" on Page 11).

2. Make sure bypass valve is in the "service" (open or filtered water) position and the home's water supply is turned on.

3. Press and hold the CLEAN button to initiate the start up cycle. The button can be released when you hear the valve changing position and "RECHARGE NOW" flashes in the display.

During the start up cycle:

Throughout the start up cycle you will hear the valve changing position and notice the flow of water to drain starting and stopping. The start up cycle will take approximately 20 minutes. Avoid using water during this time. Do not set the time of day or press other buttons during the start up cycle, as this will interrupt the start up cycle. Do not unplug the power supply during the start up cycle. If the start up cycle is interrupted, it should be initiated again and allowed to run to completion.

After the start up cycle:

Once the start up procedure completes successfully, it cannot be initiated a second time. The Whole Home Water Filtration System will automatically return to the normal operation position. Once the start up cycle has run, a faucet in the home should be opened and water allowed to run for 10 minutes at the system's rated flow. If, after running the start up cycle, the water still appears discolored, manually run Clean Rinse cycles (See Page 14) until the water is clear.

If the time of day was not set before the start up cycle, set it now (See Page 12).

Check the new plumbing connections and joints once more for leaks.

Questions? Call Toll Free 1-888-64 WATER (1-888-649-2837) Monday- Friday, 8 AM - 7 PM EST
or visit www.systemsaver.com

When you call, please be prepared to provide the model and serial number, located on the rating decal on back of the cover.

Customizing Features / Options

Start a Clean Rinse Cycle

To manually start a Clean Rinse cycle, press and hold the CLEAN button for a few seconds, until "RECHARGE NOW" flashes in the display.

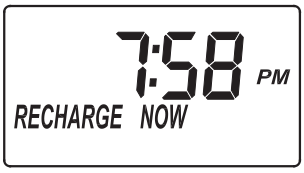


FIG. 13

Set Number of Days Between Clean Rinse Cycles

By default the Whole Home Water Filtration System will automatically initiate a Clean Rinse every 14 days. This should be sufficient for most applications.

To change the number of days between Clean Rinse cycles:

1. Press the PROGRAM button twice, so "RECHARGE" is shown in the display.

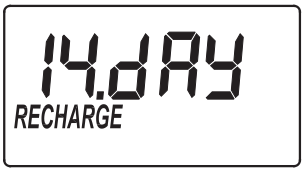


FIG. 14

2. Press the △ UP or ▽ DOWN buttons to set the number of days between Clean Rinse cycles (from 1 to 99).

3. Press the PROGRAM button twice when complete.

Set Clean Rinse Time

By default the Whole Home Water Filtration System will Clean Rinse at 1:00 a.m.

To change the Clean Rinse start time:

1. Press the PROGRAM button three times, so "RECHARGE TIME" is shown in the display.

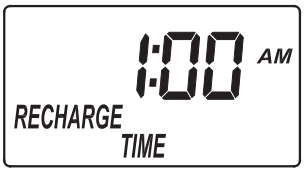


FIG. 15

2. Press the △ UP or ▽ DOWN buttons to set the Clean Rinse time. Be sure AM or PM is correct.

3. Press the PROGRAM button again when complete.

Set Length of Clean Rinse

By default the Whole Home Water Filtration System's Clean Rinse cycle will consist of a 2 minute backwash followed by a 1 minute fast rinse. This should be sufficient for most applications.

Increasing the length of Clean Rinse time will increase the amount of water flushed to drain during each Clean Rinse cycle, therefore, these times should only be increased when necessary.

To change the length of the **backwash** part of the Clean Rinse cycle:

1. Press and hold the PROGRAM button for a few seconds, until the "000 - -" screen appears, as shown in Figure 16.

FIG. 16

2. Press the PROGRAM button once, so "bA TIME" appears in the display.

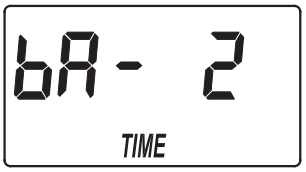


FIG. 17

3. Press the △ UP or ▽ DOWN buttons to set the length of backwash in minutes.

4. Press the PROGRAM button twice when complete.

To change the length of the **fast rinse** part of the Clean Rinse cycle:

1. Press and hold the PROGRAM button for a few seconds, until the "000 - -" screen appears, as shown in Figure 16.

2. Press the PROGRAM button twice, so "Fr TIME" appears in the display.

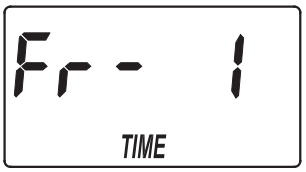


FIG. 18

3. Press the △ UP or ▽ DOWN buttons to set the length of fast rinse in minutes.

4. Press the PROGRAM button again when complete.

Customizing Features / Options

Operating in Manual Clean Rinse Mode

Clean Rinse cycles will run automatically, unless the automatic Clean Rinse function has been disabled. If this function has been disabled, it will be necessary to manually initiate any Clean Rinse cycles. It is recommended that a Clean Rinse cycle should be run at least once each month, or more frequently if necessary.

A manual Clean Rinse mode may be used when a drain (required for automatic Clean Rinse) is not available. However, it is recommended that automatic Clean Rinse be used if the drain requirements can be met.

IMPORTANT: During the Clean Rinse cycle, whether manually or automatically initiated, water will flow from the valve drain port. If a permanent drain line has not been installed, provisions must be made for the drain flow prior to initiating a Clean Rinse cycle.

DISABLING AUTOMATIC CLEAN RINSE

To disable the automatic Clean Rinse function:

1. Press and immediately release the CLEAN button (pressing and holding the button a few seconds would initiate a Clean Rinse cycle).

2. "VAC" should flash in the display, as shown in Figure 19, indicating that the Whole Home Water Filtration System is in the manual Clean Rinse mode (the automatic Clean Rinse function has been disabled).

FIG. 19

MANUALLY STARTING A CLEAN RINSE CYCLE

To manually start a Clean Rinse cycle:

1. Press and hold the CLEAN button for a few seconds, until "RECHARGE NOW" flashes in the display, as shown in Figure 20.

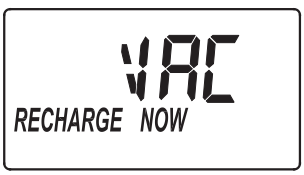


FIG. 20

2. When the Clean Rinse cycle is complete, the Whole Home Water Filtration System will remain in the manual Clean Rinse mode.

RE-ENABLING AUTOMATIC CLEAN RINSE

To return the Whole Home Water Filtration System to its automatic Clean Rinse function:

1. Press and immediately release the CLEAN button.

2. The flashing "VAC" on the display should be replaced by the normal time of day screen, as shown in Figure 21.

FIG. 21

Power Outage Memory

If electrical power to the Whole Home Water Filtration System is lost, "memory" built into the controller circuitry will keep all settings for several hours. While the power is out, the display is blank and the Whole Home Water Filtration System will not Clean Rinse.

When electrical power is restored, you have to reset the time of day only if the display is flashing. The Clean Rinse TIME never requires resetting unless a change is desired. Even if the clock is incorrect after a long power outage, the Whole Home Water Filtration System works as it should to keep your water treated. However, Clean Rinse cycles may occur at the wrong time of day until you reset the clock to the correct time of day.

NOTE: If the Whole Home Water Filtration System was in a Clean Rinse cycle when power was lost, it will now finish the cycle.

Care of Your Whole Home Water Filtration System

Vacations and Extended Periods of No Water Use

If your Whole Home Water Filtration System will not be used for an extended period of time (several months), please follow one of these recommendations:

- If the water supply to the unit is not turned off, and the automatic Clean Rinse function has not been disabled, then no further actions are required.
- If the Clean Rinse cycle cannot be automatically run, due to the water supply being shut off, the power supply being unplugged or the automatic Clean Rinse function being disabled, then it is recommended that a minimum of 2 manually initiated Clean Rinse cycles be performed when the system is placed back into operation (see Start a Clean Rinse Cycle section on Page 14).
- In any installation where there is a possibility of freezing, the Whole Home Water Filtration System should be disconnected and the water drained (see Protect the Whole Home Water Filtration System from Freezing section).

Protect the Whole Home Water Filtration System from Freezing

If the Whole Home Water Filtration System is installed where it could freeze (summer cabin, lake home, etc.), you must drain all water from it to stop possible freeze damage. To drain the unit:

1. Close the shut-off valve on the house main water pipe, near the water meter or pressure tank.

2. Open a faucet in the filtered water pipes to vent pressure in the unit.

3. Move the stem in the single bypass valve to bypass. Close the inlet and outlet valve in a 3 valve bypass system, and open the bypass valve. If you want water in the house pipes again, reopen the shut-off valve on the main water pipe.

4. Unplug the power supply at the wall outlet. Remove the cover. Take off the drain hose if it will interfere with moving the Whole Home Water Filtration System into position over the drain.

5. Remove the large holding clips at the Whole Home Water Filtration System inlet and outlet. Separate the unit from the plastic installation adaptors, or from the bypass valve.

6. Lay a piece of 2 inch thick board near the floor drain.

7. Move the Whole Home Water Filtration System close to the drain. Slowly and gently, tip it over until the rim rests on the wood block with the inlet and outlet over the drain. Do not allow the unit's weight to rest on the inlet and outlet fittings or they may break.

8. Tip the bottom of the Whole Home Water Filtration System up a few inches and hold until all water has drained. Leave the unit laying like this until you are ready to use it. Plug the inlet and outlet with clean rags to keep dirt, bugs, etc. out.

Drain all Water from Whole Home Water Filtration System

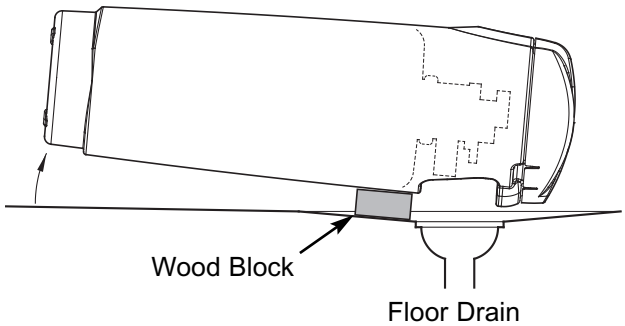


FIG. 22

Troubleshooting

PROBLEM	CAUSE	CORRECTION
Water has black or gray color	(NEW SYSTEM) Start up procedure has not been completed	Run start up procedure (See Page 13) or run consecutive Clean Rinse cycles (See Page 14) until water color returns to normal.
	(NOT A NEW SYSTEM) Normal abrasion of filtration media	Manually initiate a Clean Rinse cycle (See Page 14).
Low water pressure at house faucets	Sediment filter screen is clogged	Manually initiate a Clean Rinse cycle (See Page 14).
		If the filter screen is frequently plugging, it may be necessary to adjust the frequency of Clean Rinse cycles or add a sediment filter upstream (See Figure 3 on Page 7).
	Filtration media pores are blocked	Manually initiate a Clean Rinse cycle (See Page 14).
		If the filtration media pores are frequently blocking, it may be necessary to increase the frequency of Clean Rinse cycles.
Water has objectionable taste and/or odor	System is in bypass	Move bypass valve(s) to normal operating (non-bypass) position.
	Filtration media pores are blocked	Manually initiate a Clean Rinse cycle (See Page 14).
		If the filtration media pores are frequently blocking, it may be necessary to increase the frequency of Clean Rinse cycles.
No water flow to drain during Clean Rinse cycle	System is in bypass	Move bypass valve(s) to normal operating (non-bypass) position.
	Drain flow control is plugged	Clean drain flow control (See Page 18).
	Drain hose is plugged or kinked	Straighten drain hose.
	Power supply is unplugged from wall electrical outlet (display will be blank)	Check for loss of power and correct.
Clean Rinse cycle does not run automatically	If display reads “VAC”, then Clean Rinse function has been disabled	Press and release the CLEAN button until display no longer reads “VAC”.
	If display is blank, power supply may be unplugged from wall electrical outlet	Check for loss of power.
Clean Rinse cycle does not run at the programmed time of day	If time display is flashing, then a long power loss caused the clock to lose its time setting	Reset the clock to the correct time of day (See Page 12).
Steady beeping from electronic control	Electronic control board is wet	Allow 48 hours for board to dry, or use blow dryer.
Error Code E1, E3 or E4 appears	Fault in wiring harness or connections to position switch	Replace wiring harness or connection to position switch (See parts list at end of this manual).
	Fault in switch	Replace switch (See parts list at end of this manual).
	Fault in valve causing high torque	Replace rotor/seal kit (instructions included with kit).
	Motor inoperative	Replace motor (instructions included with motor)
Error Code E5 appears	Electronic control	Replace electronic control board (PWA) (instructions included with PWA).

Need help troubleshooting? Call Toll Free 1-888-64 WATER (1-888-649-2837)

Monday- Friday, 8 AM - 7 PM EST **or visit www.systemsaver.com**

When you call, please be prepared to provide the model and serial number, located on the rating decal on back of the cover.

Troubleshooting

Procedure for removing error code from display:

1. Unplug power supply from electrical outlet.
2. Correct problem.
3. Plug power supply back in.
4. Wait 8 minutes. The error code will return if the problem was not corrected.

Assistance from customer service may be needed with the following:

PROBLEM	CAUSE	CORRECTION
Water running to the drain (while unit is not in the Clean Rinse cycle)	Inner valve defect causing leak	Replace seals and rotor
Filter media in household plumbing	Crack in distributor or riser tube	Replace distributor or riser tube.

Resetting to Factory Defaults

To reset the electronic controller to its factory default for all settings (time, number of days between Clean Rinse cycles, etc.):

1. Press the PROGRAM button and hold it until the display changes twice to show “CODE” and the flashing model code.

2. Press the △ UP button twice to display a flashing “SoS”.

3. Press the PROGRAM button, and the electronic controller will restart.

4. Set the present time, as described on page 12.

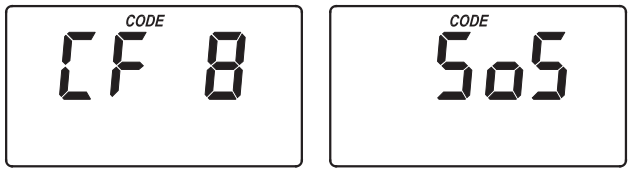


FIG. 23

Cleaning the Drain Flow Control

This procedure is not required if the Whole Home Water Filtration System is operating normally. It should be performed only if a problem with lack of water flow to drain is encountered, as detailed in the troubleshooting table on Page 17.

1. Remove the clip holding the drain fitting into the valve (See Figure 24).

2. Remove the drain fitting from the valve

3. Clear any obstruction.

4. Reinstall the drain fitting into the valve.

5. Reinstall the clip to secure the drain fitting in the valve.

Removing Drain Fitting to Clean Flow Control

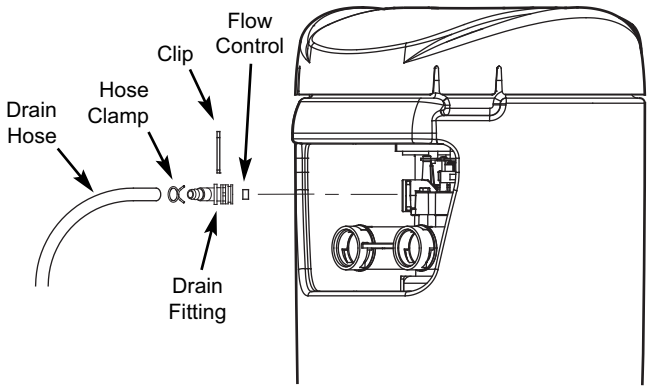


FIG. 24

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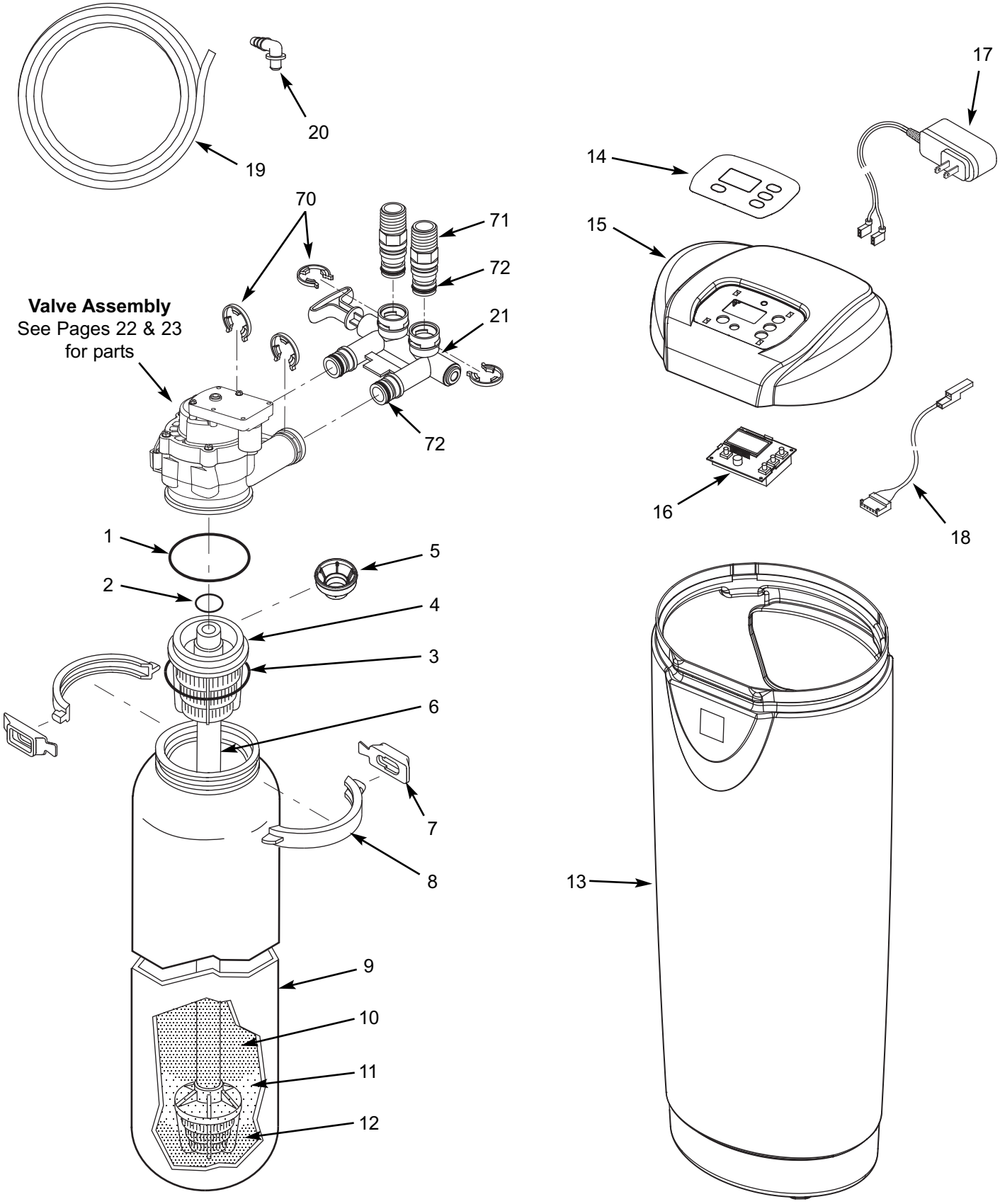
Notes

Whole Home Water Filtration System Exploded View



Whole Home Water Filtration System Parts List

Key No.	Part No.	Description
■	7311038	Assembly, Replacement Mineral Tank, w/media & associated components (Includes Key Nos. 1 through 13)
–	7112963	Distributor O-Ring Kit (includes Key Nos. 1-3)
1	↑	O-Ring, 2-7/8” x 3-1/4”
2	↑	O-Ring, 13/16” x 1-1/16”
3	↑	O-Ring, 2-3/4” x 3”
4	7077870	Top Distributor
5	7265025	Filter Screen
6	7105047	Repl. Bottom Distributor
–	7331177	Tank Neck Clamp Kit (includes 2 ea. of Key Nos. 7 & 8)
7	↑	Retainer Clip (2 req.)
8	↑	Clamp Section (2 req.)
9	✱	Mineral Tank, 8” x 25”
10	✱	Activated Carbon, 10 lbs.
11	✱	Filter Sand, 5 lbs.
12	✱	Gravel, 6 lbs.
13	✱	Outer Shroud Tank, with Morton Badge
14	7310781	Faceplate Decal
15	7310773	Cover (order decal above)
16	7311020	Repl. Electronic Control Board (PWA)
17	7337482	Power Supply, 28V DC
18	7259927	Wire Harness
19	7139999	Drain Hose, 20 ft.
20	1103200	Adaptor Elbow
21	7278434	Bypass Valve Assembly, 3/4”, including 2 O-Rings (See Key No. 72)
■	7339955	Owner’s Manual

■ Not illustrated.

✱ Mineral Tank and media can only be purchased as part of the Replacement Mineral Tank Assembly (See top of list).

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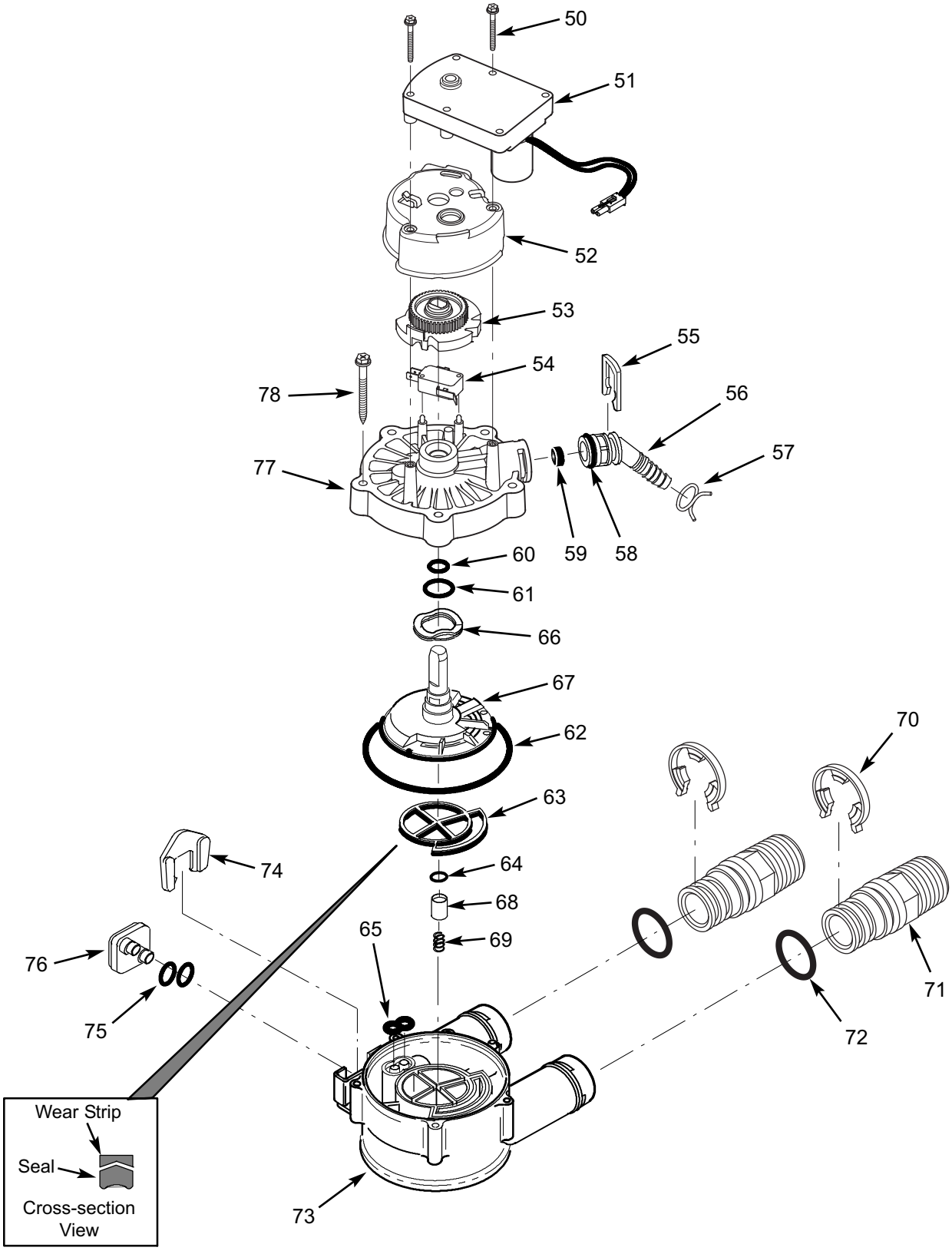
Valve Assembly Exploded View



Valve Parts List

Key No.	Part No.	Description
50	7338111	Screw, #6-19 x 1-3/8” (2 req.)
51	7281291	Motor
52	7337474	Motor Mount
53	7284964	Cam & Gear
54	7030713	Switch
–	7331274	Drain Hose Adaptor Kit (incl. Key Nos. 55-59)
55	↑	Clip, Drain
56	↑	Adaptor, Drain Hose
57	↑	Hose Clamp
58	↑	O-Ring, 5/8” x 13/16”
59	↑	Flow Plug, 3.4 gpm
–	7129716	Seal Kit (includes Key Nos. 60-65)
60	↑	O-Ring, 7/16” x 5/8”
61	↑	O-Ring, 3/4” x 15/16”
62	↑	O-Ring, 3-3/8” x 3-5/8”
63	↑	Rotor Seal
64	↑	O-Ring, 3/8” x 9/16”
65	↑	Seal, Nozzle & Venturi
66	7082087	Wave Washer
67	7199232	Rotor & Disc
–	7342665	Drain Plug Kit, 3/4” (includes Key Nos. 64, 68 & 69)
68	↑	Plug, Drain Seal
69	↑	Spring
70	7337563	Clip, 3/4”, pack of 4
71	7342673	Installation Adaptor, 3/4”, pack of 2, including 2 ea. Clips & O-Rings (See Key Nos. 70 & 72)
72	7337571	O-Ring, 15/16” x 1-3/16”, pack of 4
73	7082053	Valve Body
74	7081201	Retainer, Nozzle & Venturi
75	7342649	O-Ring, 1/4” x 3/8”, pack of 2
76	7100940	Plug, Aspirator Port
77	7337466	Valve Cover
78	7342657	Screw, #10-14 x 2”, pack of 5

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